## REMARKS

Claims 1-14 are pending in the above-identified application. The Examiner has rejected claims 1-14.

## Claim Objections

Examiner is thanked for withdrawing the previous objection of claim 4.

## Claim Rejections Under 35 U.S.C. § 103(a)

Claims 1, 3-9, and 11-14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,766,471 to Ovshinsky et al. ("Ovshinsky") in view of reference titled "Optical Networks: A Practical Perspective", 2nd ed., ("Ramaswami") and in further view of U.S. Patent No. 5,323,520 to Peters et al. ("Peters") and to U.S. Patent Publication No. U.S. 2003/0142929 A1 to Bartur et al. ("Bartur").

To establish a prima facie case of obviousness, the MPEP and the case law requires that (1) the prior art references must teach or suggest all claimed elements, (2) there must be some reason why a person of ordinary skill in the art would have combined the prior art elements in the manner claimed, and (3) there must be a reasonable expectation of success. *See MPEP § 2142* and *USPTO Memorandum* from Margaret A. Focarino, Deputy Commissioner for Patent Operations, May 3, 2007, page 2. Applicants respectfully submit that the cited references fail to meet at least one of these requirements with regards to the rejected claims.

Claim 1 recites "a transmitter portion arranged on a bottom layer of a multi-layer board, the transmitter portion capable of providing signals to a transmitter optical subassembly; a receiver portion arranged on the bottom layer of the multi-layer board." Ovshinsky discloses "two integrated circuit structures 540 and 542 [shown in Fig. 16A] each having multiple device planes, and each being equipped with one or more light-emitting DIFETs [Dielectrically-Isolated

Field Effect Transistor] on the sides 544 and 546 of structures 540 and 542 respectively, said sides facing one another" (Column 30, lines 5-10). In Ovshinsky, optical information is transmitted from face 544 of structure 540 to face 546 of structure 542 (Column 30, lines 10-17). "Thus, bidirectional optical communication between photo-active devices of the two structures is possible" (Column 10, lines 17-20). Thus, the transmitter face of Ovshinsky is a separate structure from the receiving face. This is in contrast to the limitation of claim 1 where the transmitter and receiver are arranged at the bottom layer of a multi-layer board. Therefore, the combination of Ovshinsky, Ramaswami, Peters, and Bartur fail to disclose, teach, or suggest both a transmitter and a receiver portion mounted on the bottom of the circuit board, as required by claim 1.

Claim 1 further recites "a metallic ground plane arranged on a first intermediate layer between the top layer and the bottom layer, the metallic ground plane providing electrical isolation between the high-voltage power supply and the transmitter portion and the receiver portion." Peters discloses a "capacitor comprising a pair of conductive plates 6, each plate being connected to either a pair of ground electrical terminals 7 or power electrical terminals 8. A dielectric substrate 9 encloses and separates the pair of conductive plates to form the capacitor." (Column 4, lines 61-66). The dielectric substrate of Peters acts to insulate the pair of conductive plates from each other so that a charge may be stored on the conductive plates. In contrast, the transceiver system of claim 1 has a metallic ground plane between a high voltage power supply and the transceiver. The metallic ground plane is an electrical conductor and prevents charge from being stored between the high voltage power supply and the transceiver system. The use of a metallic ground plane in Peters would allow charge to flow between the conductive plates, and therefore frustrate the purpose of the capacitor. Thus, the capacitor of Peters teaches away from

the transceiver system of claim 1. The conductive plates connected to ground or power electrical terminals of Peters fail to disclose, teach, or suggest a metallic ground plane providing electrical isolation between a high voltage power supply and a transmitter and receiver. Thus, Peters in combination with Ovshinsky, Ramaswami, and Bartur fail to disclose, teach, or suggest the transceiver system of claim 1.

Therefore, neither Ovshinsky, Ramaswami, Peters nor Bartur alone or in combination, disclose, teach, or suggest all of the elements of claims 1 and Applicants respectfully submit that this claim is allowable over these prior art references. Claims 3-6 depend from claim 1 and are allowable for at least the reasons stated above.

Independent claims 7, 8, and 14 provide language that is similar to that found in claim 1. For at least the reasons provided above, Applicants respectfully submit that claims 7, 8, and 14 are patentable over the cited prior art. Claims 9, and 11-13 depend from claim 8, and are patentable for at least the same reasons as claim 8.

Claims 2 and 10

Claims 2 and 10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ovshinsky in view of Ramaswami and in further view of Peters and to Bartur as applied to claims 2 and 10, and in further view of U.S. Patent No. 5,097,393 to Nelson et al. ("Nelson") as applied to claims 2 and 10.

Claims 2 and 10 are allowable over the combination of Ovshinsky, Ramaswami, Peters, Bartur, and Nelson for at least the reasons stated above. They are also allowable for the additional reasons stated below. The disclosure of Nelson is specific to power and ground plane arrangements disclosing that "both the power plane (and the ground plane, if desired) can be split

into several electrically isolated segments to deliver different power and reference voltages" (column 12, lines 26-29). This fails to disclose, teach, or suggest the system of claim 2 wherein the transmitter portion and the receiver portion are arranged in a split-ground arrangement. Nelson also fails to disclose, teach, or suggest the method of claim 10 wherein "a split ground between the high-voltage power supply and the other circuitry" is provided.

Therefore, neither Ovshinsky, Ramaswami, Peters, Bartur, nor Nelson alone or in combination, disclose, teach, or suggest all of the elements of claims 2 and 10 and Applicants respectfully submit that these claims are allowable over these prior art references for at least the reasons stated above.

## Conclusion

In view of the foregoing amendments and remarks, Applicants respectfully requests reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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GARRETT & DUNNER, L.L.P.

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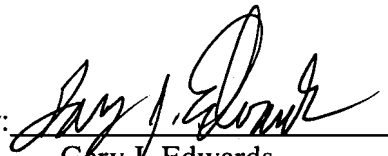
By: 

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